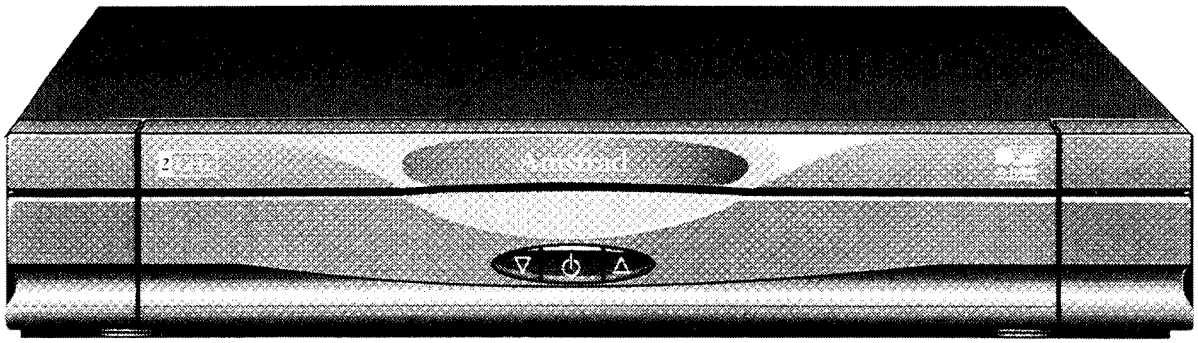
Amstrad



SRX340

O.S.P. SATELLITE RECEIVER

SERVICE MANUAL

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Date of First Publication July 1993.
Information published was latest available at the time of print.
Amstrad reserves the right to supply selective components.

SPECIFICATION

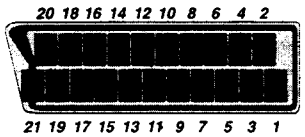
RECEIVER

Dimensions, weight:	335 x 250 x 62mm, 1.9kg
Mains supply:	220-230V ac 50Hz
Tuning range:	700-2050MHz
Channel bandwidth:	27MHz
Local oscillator range:	0 and 9.3-12GHz
Fine tuning range:	±10MHz
Dynamic range:	-20 to -60dBm
AM co-channel interference threshold:	-15dBc typical
Threshold:	8dB C/N (with threshold extension
RF output:	Channel 38 (adjustable 30-40)
Audio subcarrier:	5.5-8.5MHz
Audio output level:	2V pk-pk at 50kHz input deviation
Audio response:	40Hz-15kHz
Input/output connectors:	LNB 75 ohms F-type
	RF 75 ohms coaxial (x2)
	AUDIO OUT RCA phono (x2)
	SCART/PERITEL 21-way
	DECODER 21-way

SLB3 LNB

Input frequency range:	10.70-11.80GHz
Output frequency range:	950-2050MHz
Local oscillator:	9.75GHz
Gain:	55dB
Noise figure:	1dB typical
Polarisation switching:	Electrical (13/17V)
Output connector:	75 ohms F-type

BACK PANEL SOCKETS



TV SCART/PERITEL

1	Audio out R	12	Serial interface (clock) †
2	Audio in R	13	Red ground
3	Audio out L	14	Serial interface ground †
4	Audio ground	15	Red*
5	Blue ground	16	Blanking*
6	Audio in L	17	Video ground
7	Blue*	18	Blanking ground
8	External switching	19	Video out
9	Green ground	20	Video in
10	Serial interface (data) †	21	Shield/ground
11	Green*		

DECODER

1	Audio out R	11	Green
2	Audio in R	12	MAC baseband out
3	Audio out L	13	Ground
4	Audio ground	14	(not used)
5	Ground	15	(not used)
6	Audio in L	16	(not used)
7	(not used)	17	Video ground
8	Audio/video $\overline{\text{INT}}$/EXT	18	(not used)
9	Ground	19	PAL baseband out (filtered/clamped)
10	PAL baseband out (unfiltered/unclamped)	20	Video in
		21	Shield/ground

* (not implemented)
† (dealer use only)

SAFETY TEST

Please note: when any work is carried out on a set, the following safety must be carried out to ensure continued electrical safety.

1) Flash Test:
Test at 4kV between the live and neutral of the mains lead joined together and ALL accessible metal points on the exterior of the set.

2) Insulation Resistance Test:
Test between the live and neutral of the mains lead joined together and ALL accessible metal points on the exterior of the set to show resistance of at least 4M ohm.

In keeping with our policy of continually improving our service and the technical quality of our products, we reserve thr right to change component type, manufacturers,sources of supply or technical specifications at any time.

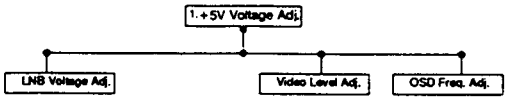
Amstrad Plc.
BRENTWOOD HOUSE, 169 KINGS ROAD. BRENTWOOD ESSEX CM14 4EF

ALIGNMENT INSTRUCTIONS

NOTE:
Electrical adjustment is required after replacing certain components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.
NOTE: This flow chart indicates, the electrical adjustment step.

TEST EQUIPMENT REQUIRED

1. Oscilloscope: Dual-trace with 10:1 probe,
   V-Range: 0.001~50v/Div.,
   F-Range: AC~DC-20MHz
2. PAL Pattern Generator
   (Color bar with 100% white)
3. AC Voltmeter (RMS)



1. 5V Rail Adjustment

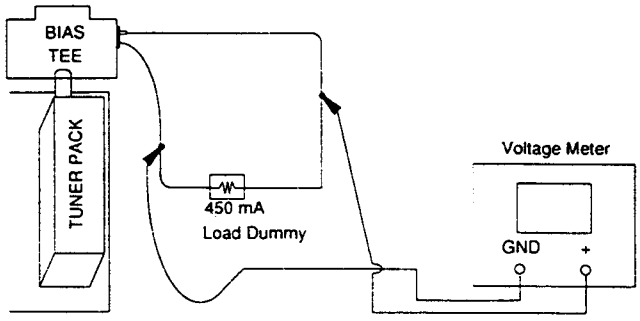
.1 Apply signal to RF Input.
.2 Adjust RV600 carefully to set +5V on Pin 1.
PL400 Card Reader to +5.00V ±0.125V.

2. LNB Voltage Adjustment

Purpose:
To separate receiving signal into horizontal and vertical polarisation.
Symptom of Misadjustment:
Receiving signal is not separated into horizontal and vertical correctly.

Test Point	Adj. Point	Mode	Input
LNB Voltage LNB: 450mA Load LNB Polarity: H (+17V)	RV1 (PSU PCB)	—	—
Tape	M. EQ.	Spec.	
—	Voltage Meter	H: 17.2~18.0V (V: 12.8~13.4V)	

Connections of M. EQ.



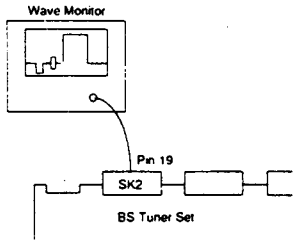
Reference Notes:
1. Check that LNB Polarity is "H" on the step 1 (Vp-p Voltage Adjustment).
2. Connect equipment as shown in the above table.
3. Adjust RV1 to obtain 17.6V LNB Voltage.

3. Video Level Adjustment

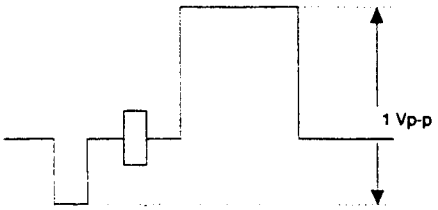
Purpose:
Adjust Contrast level of video signal at TV Scart/Modulator output.
Symptom of Misadjustment:
Display will be too dark or too bright.

Test Point	Adj. Point	Mode	Input
SK2 Pin 19 LNB: 450mA Load LNB Polarity: H (+17V)	RV1 (Main PCB)	—	CH8: 1317.5MHz, White 100%, RF= -45dBm, C/N= Max
Tape	M. EQ.	Spec.	
—	Wave Monitor	Video Level: 1Vp-p±0.5Vp-p	

Connections of M. EQ.



Figure



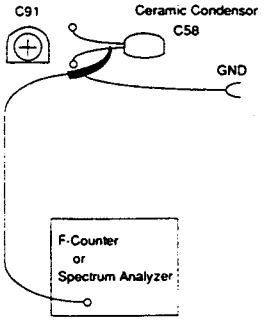
Reference Notes:
1. Input CH8: 1317.5MHz, White 100%, RF=-45dBm, C/N=Max.
2. Connect the signal from SK2 Pin 19 to Wave Monitor.
3. Adjust RV1 (Main PCB) to obtain 1Vp-p.

4. OSD Freq. Adjustment

Purpose:
To adjust frequency of OSD (On Screen Display) control signal.
Symptom of Misadjustment:
OSD may be not distinct or colour background may be grey.

Test Point	Adj. Point	Mode	Input
C58 LNB: 450mA Load LNB Polarity: H (+17V)	C91	—	—
Tape	M. EQ.	Spec.	
—	Spectrum Analyzer or F-Counter	OSD Freq. : 17.734475MHz±200Hz	

Connections of M. EQ.

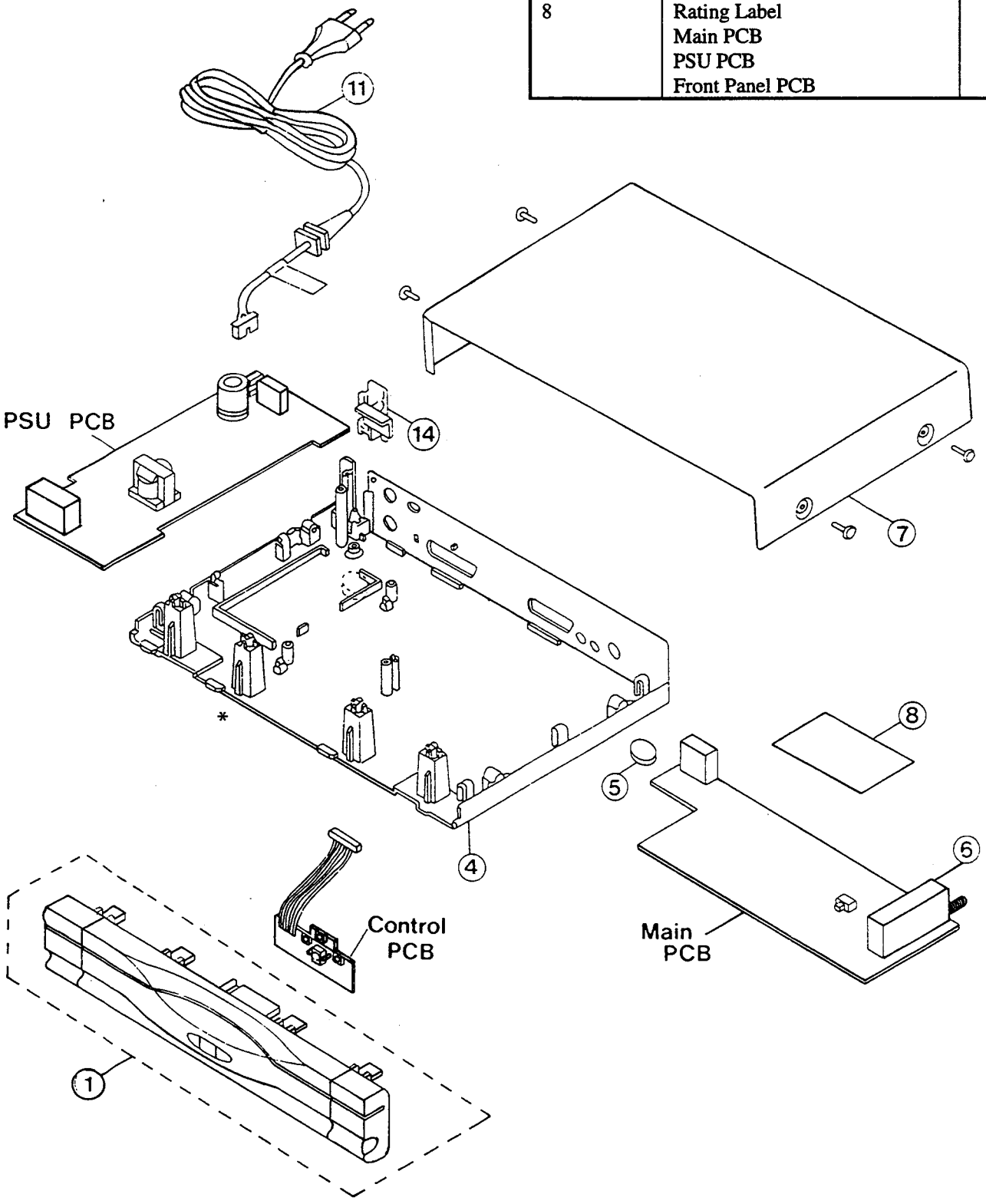


Reference Notes:
1. Push "TIMER" key on the Remote Control to place units in TIMER mode.
2. Connect equipment as shown in the above table.
3. Adjust C91 to obtain 17.734475MHz.

SRX340 Cabinet Parts List

Ref. No	Description	Pt.No
7	Top Cabinet	242155
1	Front Panel Assy	242156
4	Bottom Cabinet	241566
5	Foot Rubber Rear	241545
	Foot Rubber Front	
14	Rear Insert	240741
11 ⚠	Mains Cord	240861
8	Rating Label	
	Main PCB	
	PSU PCB	
	Front Panel PCB	

CABINET EXPLODED VIEW



* NOTE: Remove screw at the time of disassembly

Electrical Parts List

Ref No	Description	Pt.No
	ICs	
IC1,10	IC MC14053BCP	152353
IC2	IC TDA61602X	241395
IC3	IC LM1894N	241393
IC4	IC 24C08 EEPROM	241542
IC5	IC 68HC05D24 CPU V2.0	241530
IC6	IC 78L05AC Regulator	250009
IC8	IC UPD6450CX-002	241531
IC300	IC LM392	241544
IC500	IC 1S1U60L Ir Sensor	241529
IC600	IC CS3842A	241537
IC601	IC CNY17F-3X PC111L Opto C'pler	241539
IC602	IC TL431CLP Shunt Regulator	241538
	Transistors	
TR43	Tr DTC124ES	152050
TR2,4,7,8,10 11,14,15,17 19-22,26,29 31,32,34,37 38,40-42 300,302	Tr 2SC1740S 2SC945X	50016
TR44	Tr DTA114E	273263
TR1,3,5,6,12 13,16,18,25 27,28,30,33 36,301	Tr 2SA933S 2SA733K	150874
TR600	Tr MJF18004	240737
TR304	Tr 2SD313D	50005
TR303	Tr 2SB1143T	240037
	Diodes	
D1-6,603-605	D 1N4148	270754
D1	D BB609	241430
D7	DZ BZX55C 6.V8 500mW	240377
D8	DZ 27V 500mW	241233
D600	D DF10M Bridge	241403
D303	D FE1A	241406
D602,606	D RGP10D	241633
D607,608	D RL2Z	240733
D601	D IN4005	241402
D4	DZ 5.1V 500mW	240815
D501	LED Red SLP030RA	241631
D500	LED Green SLP030GA	241632

Ref No	Description	Pt.No
	Coils	
L8	Coil 10UH	
L1,13	Coil 100UH 1404AE	
L12,13	Coil 100UH 1041D	
L16	Coil 100UH Choke 10457	
L7	Coil 1.2UH	
L10	Coil 1.8UH	
L9	Coil 18UH	
L3	Coil 3.3UH	
L11	Coil 33UH	
L601,602	Coil 33UH Choke	
L2	Coil3.9UH	
L4,5,14	Coil 8.2UH	
L300	Coil 330UH	
T600 ⚠	Tx Mains Switching LLP006TH	242179
L600 ⚠	Line Filter 39uH Toroidal	241637
	Miscellaneous	
SK2,4	Scart Socket	153030
	Remote Control Handset	241568
	CATV Cable 3C-2W	
	Carton	242175
	Polypacking	241629
	User Instructions	242176
S500	Tact Switch	240860
	Tuner Assy 1500-P2	242177
	Shield Metal IR Sensor	
FS600 ⚠	Fuse 1.25A (T)	240083
VR1	VRSF 10K Ω linear	240710
VR1	VRSF 500 Ω 50100 PSU	241638
C91	Trimmer Cap 40pF	24
XL11	Crystal 17.73447MHz	241640
	Crystal 4.0MHz	254427
IC7	RF Modulator CH30-40 5V	242178
XL7	Ceramic Discri. CDA10.52MG38V	240077
XL2,4	Cer. Filter SFE10.52MJA10-A	241028
XL8	Ceramic Discri. CDA10.7HG38V	240076
XL1,3	Ceramic Filter SFE10.7MJA10-A	241027
SK5	Phono Jack Red White	240798
	Slide Switch	240800

Description	Ref. No.	Pt.No.
	Resistors 1/6w	
	Unless stated differently	
0.91 Ω 1/2w	R308	
2.2 Ω 1/2w	R610	
4.7 Ω 1/2w	R609	
27 Ω 1/4w	R32	
75 Ω	R110,115	
75 Ω 1/4w	R54-56,84,129	
100 Ω	R35,36,59,60,73,76,116,120,121 123,165,307,500	
100 Ω 1/4w	R617	
100 Ω 1/2w	R607	
120 Ω	R10	
150 Ω	R8,14,15,106,111,173	
180 Ω	R176	
220 Ω	R3,47,48,50,309,608	
240 Ω	R71	
270 Ω	R157,158,203,204	
330 Ω	R93,162	
390 Ω	R49	
430 Ω	R39,40	
470 Ω	R1,7,9,51,65,67,103,108,113,118 130,144,618	
560 Ω	R34,37	
750 Ω	R72,200,201	
820 Ω	R70	
910 Ω	R29,30	
1k Ω	R7,811,12,21,22,31,57,58,62,63, 87,88,124-126,133,137,611,616	
1k Ω 1/2w	R622	
1.8k Ω	R620A,621A	
2.2k Ω	R26	
2.2k Ω 1/4w	R310	
2.7k Ω	R16	
3k Ω	R107,112	
3.3k Ω	R1,82,142,320	
4.7k Ω	R23,24,86,117,148,149,154,155 319	
5.1k Ω	R145	
6.8k Ω	R74	
8.2k Ω	R66	
10k Ω	R2,4,5,17,18,43,68,69,79,80,104 105,300,305,306,312,318,614,615 624	
15k Ω	R38,89,90	
22k Ω	R2,77,83,109,114,119,141,171 314	
27k Ω	R52,131	
27k Ω 1%	R613	
33k Ω 1/4w	R621A	

Description	Ref. No.	Pt.No.
47k Ω	R6,13,25,78,91,92,314,	
100k Ω	R3,6,44,53,64,81,132,143,156	
100k Ω 1/2w	R602,603	
150k Ω	R75	
180k Ω	R	
220 k Ω	R315	
470k Ω	R159	
820k Ω 1/2w	R600	
1M Ω	R45,122,127,128,612	
	Fuse	
2.2 Ω 1/4w	R604	272445
	Wire Wound	
10 Ω 5w	R601	242143
1k Ω 5w	R605	241378
	Capacitors	
	Ceramic	
4.7pF	C51,111	
15pF	C84	
22pF	C5,37,47,61,83	
33pF	C53	
47pF	C52,58	
56pF	C90,105	
82pF	C19	
100pF	C7,59,108,303	
150pF	C4,106	
200pF	C3,10	
270pF	C36	
330pF	C63	
330pF 1kV	C610 ⚠	241381
100pF	C	
0.001µF	C1-3,25,34,98,110,613	
0.001µF !	C602,603,608	
0.0033µF	C27,27,60	
0.0047µF	C104	
0.01µF	C9,30,33,35,38,616	
0.047µF	C20	
0.1µF	C2,12,16,26,39,40,41,56,57,82,85 87,89,100,107,306	
	Electrolytic	
1µF 50V	C31,43,102,103,611,614	
10µF 16V	C6,14,15,22,23,45,48,49,55,64-66 71-80	
10µF 16V np	C1,13,32	
10µF 35V	C113	
68µF 400V	C609	
100µF 10V	C500	
100µF 16V	C18,44,62,93	

Description	Ref. No.	Pt.No.
100µF 25V	C612	
100µF 50V	C302	
330µF 16V	C622	
330µF 35V	C621	
330µF 50V	C620	
470µF 6.3V	C46	
470µF 10V	C623	
470µF 16V	C305	
	Mylar	
0.082µF	C21,24	
	Polyester	
0.001µF 100v	C8,615	
0.1µF	C11,54	
0.22µF 63V	C617	
0.47µF	C88,94,95	
	Metal Film	
0.1µF	C601	
0.22µF 250V ⚠	C600	253612

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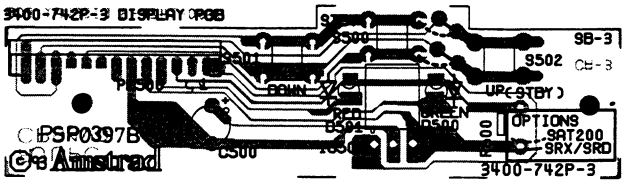
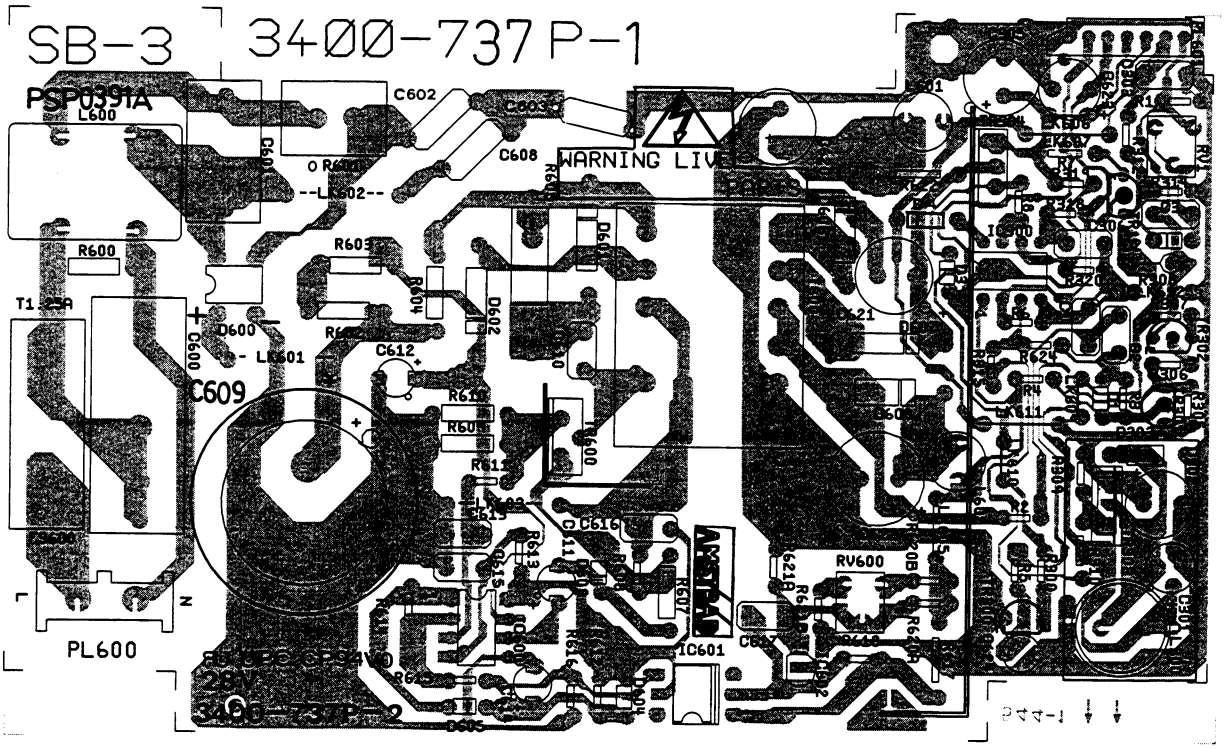
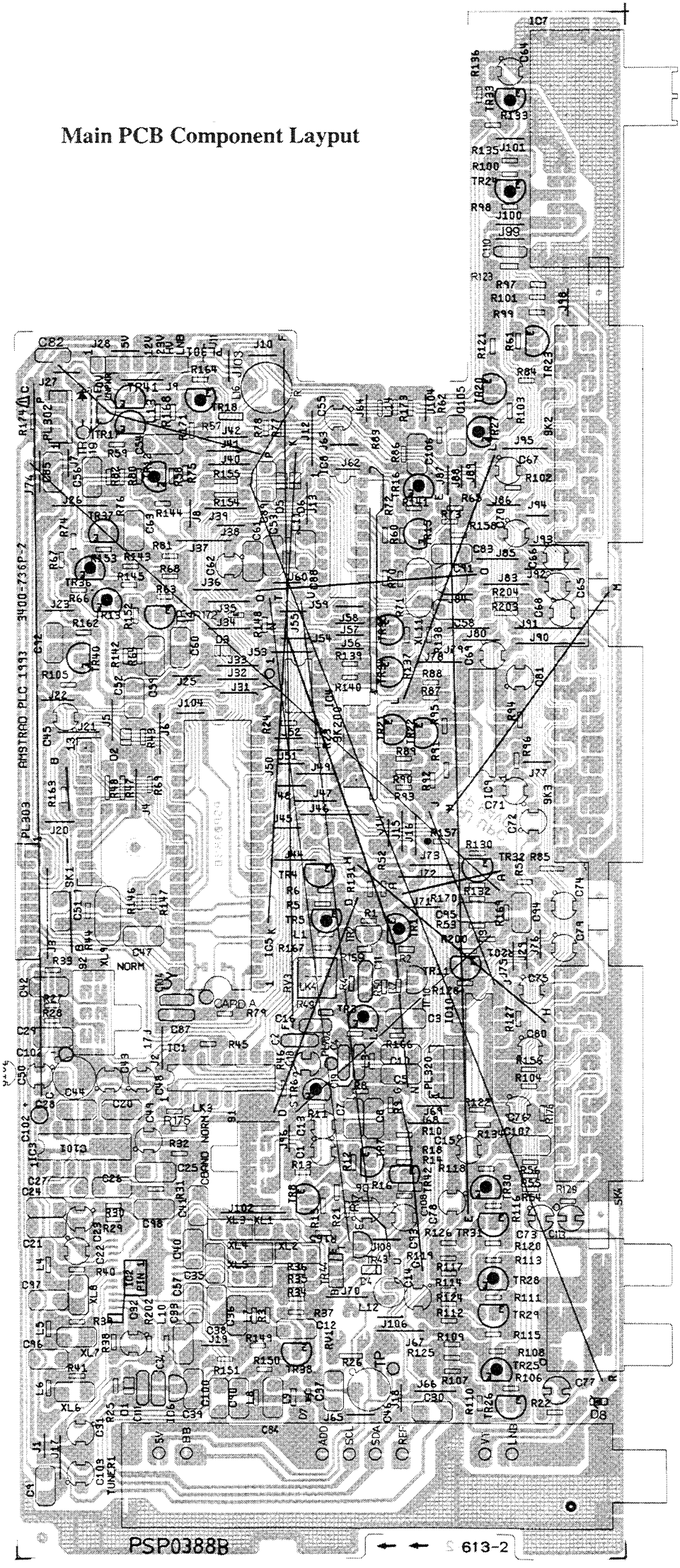
Front Panel PCB Component Layout



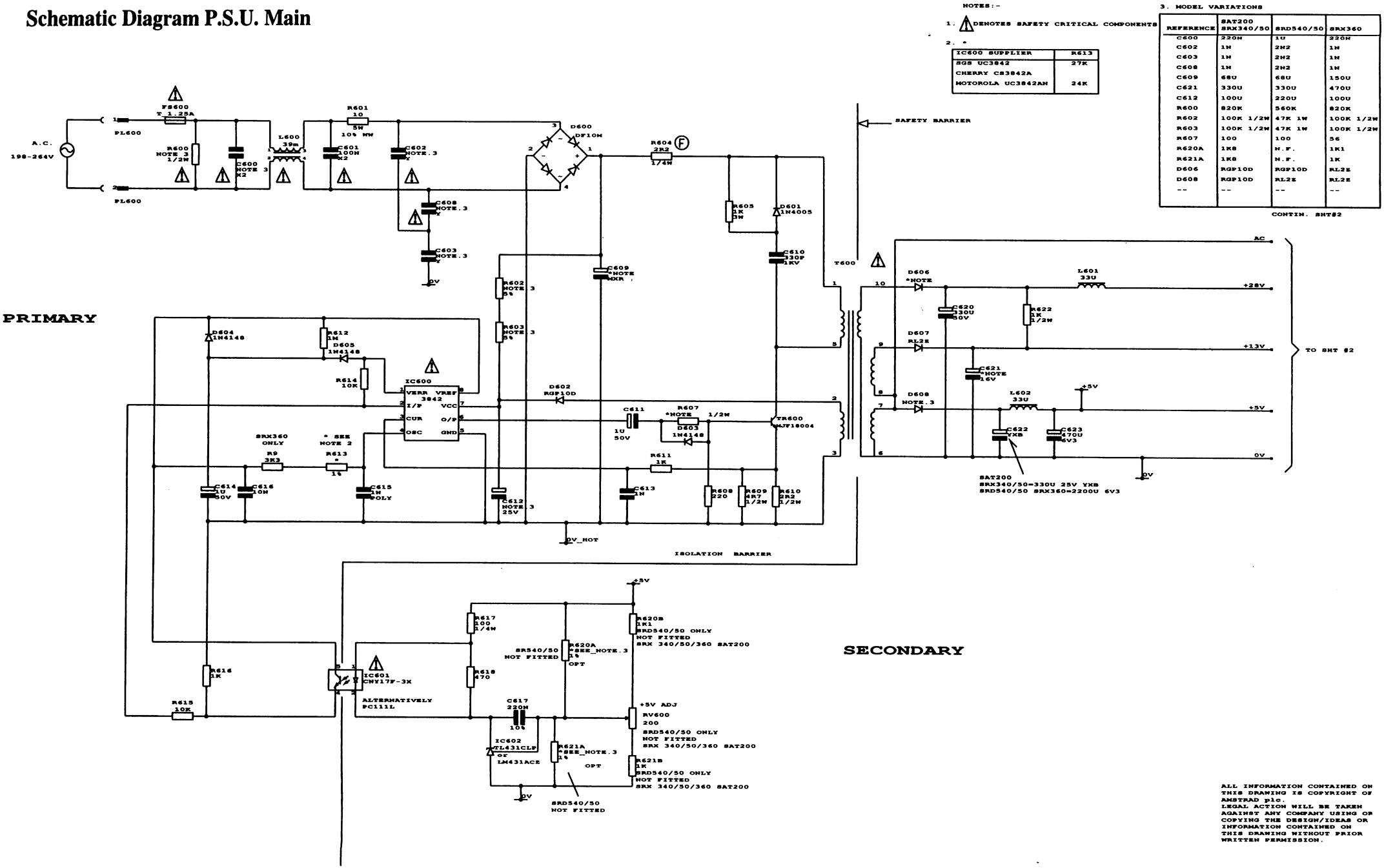
P.S.U. PCB Component Layout



Main PCB Component Layput



Schematic Diagram P.S.U. Main



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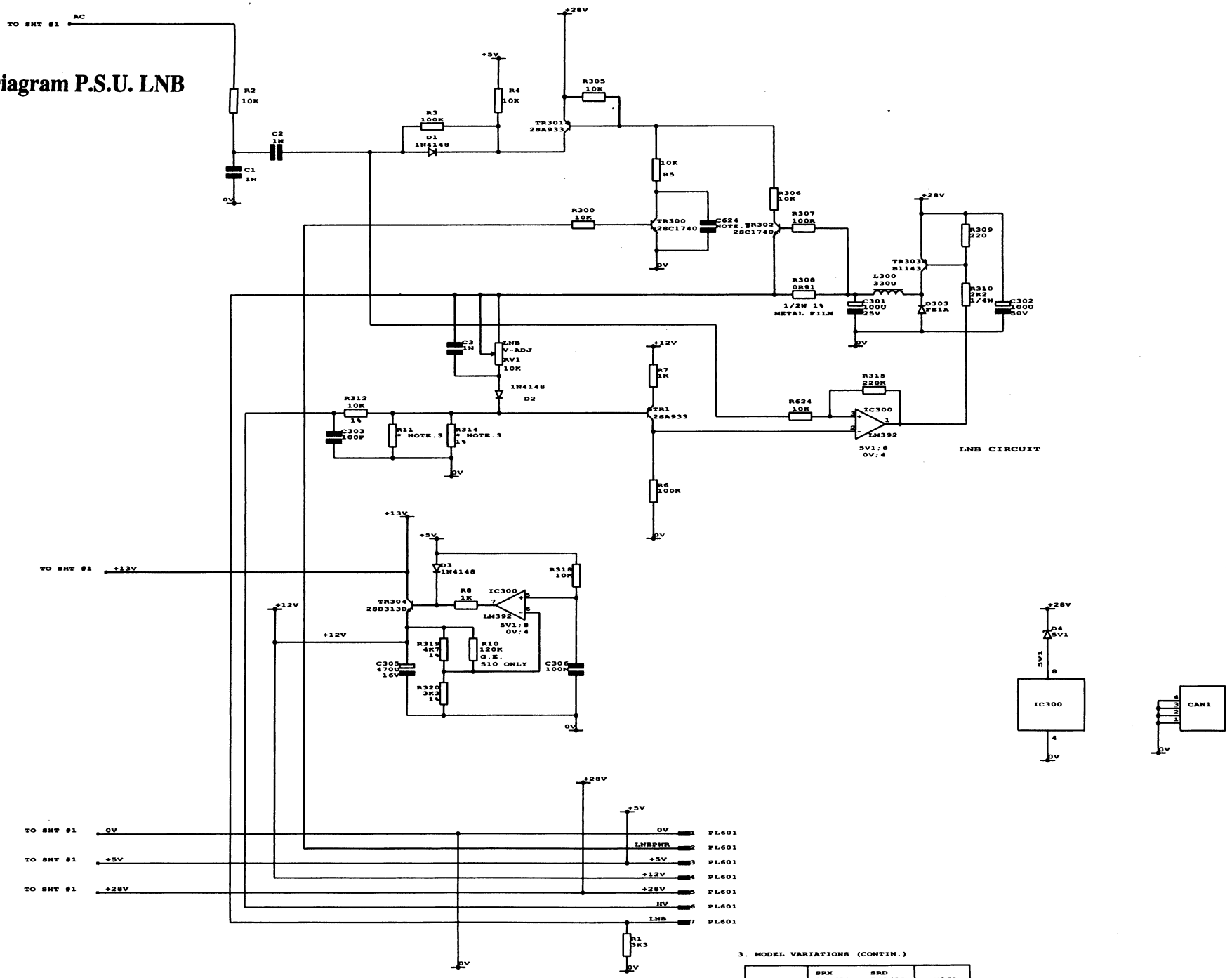
Schematic Diagram P.S.U. LNB



3. MODEL VARIATIONS (CONTIN.)

REFERENCE	SRX 340/50 SAT200	SRD 540/50	SRX360
C624	NF	NF	100N
R314	47K 1%	47K 1%	39K 1%
R11	180K 5%	180K 5%	NF
--	--	--	--

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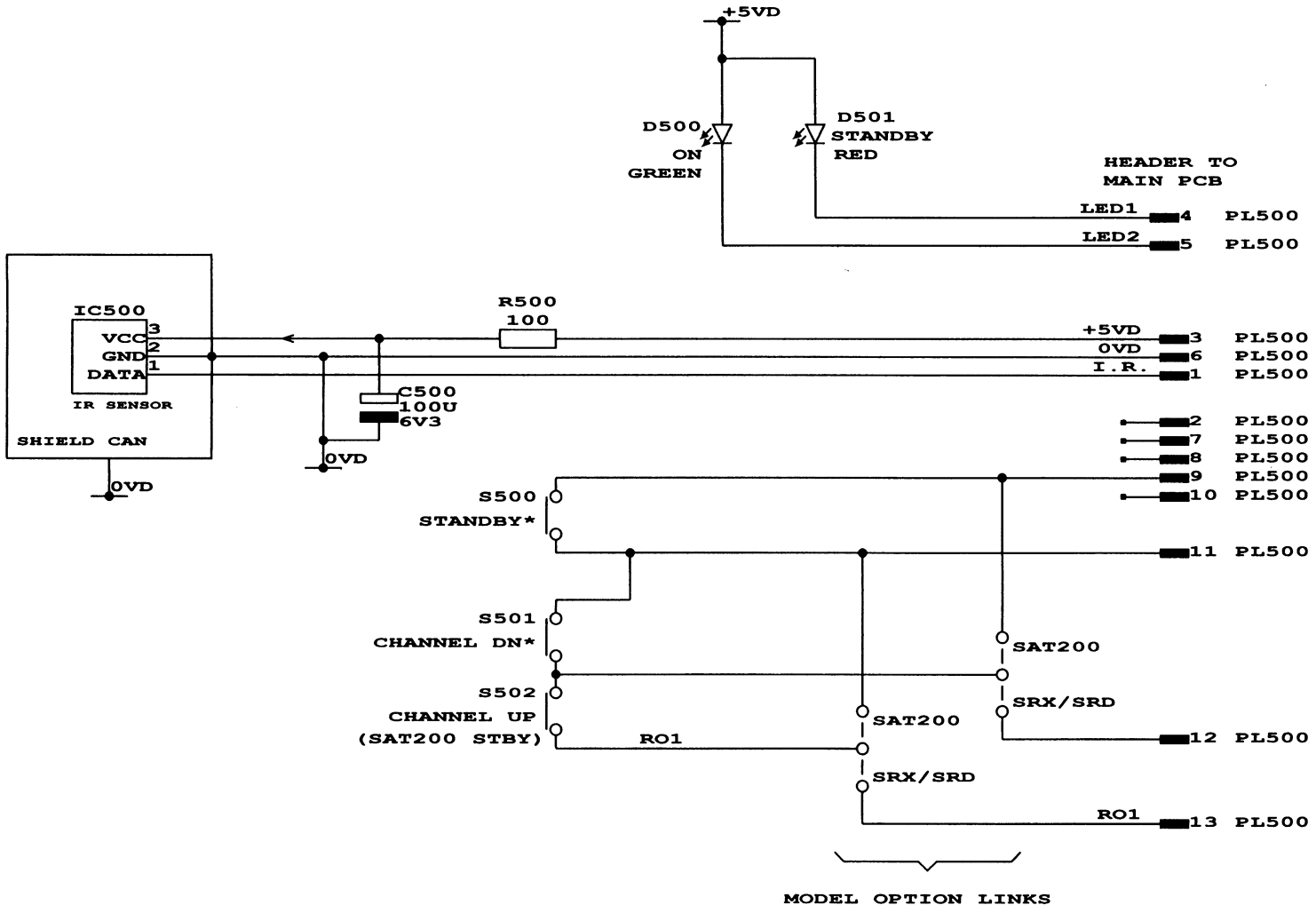
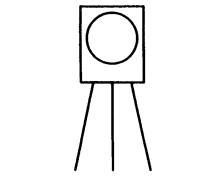
Schematic Diagram Front PCB



NOTES:-

1. +5V (180mA) TOTAL
2. +12V (0mA)
3. * NOT FITTED TO SAT200

SENSOR
SHARP 1SU60L
FRONT VIEW



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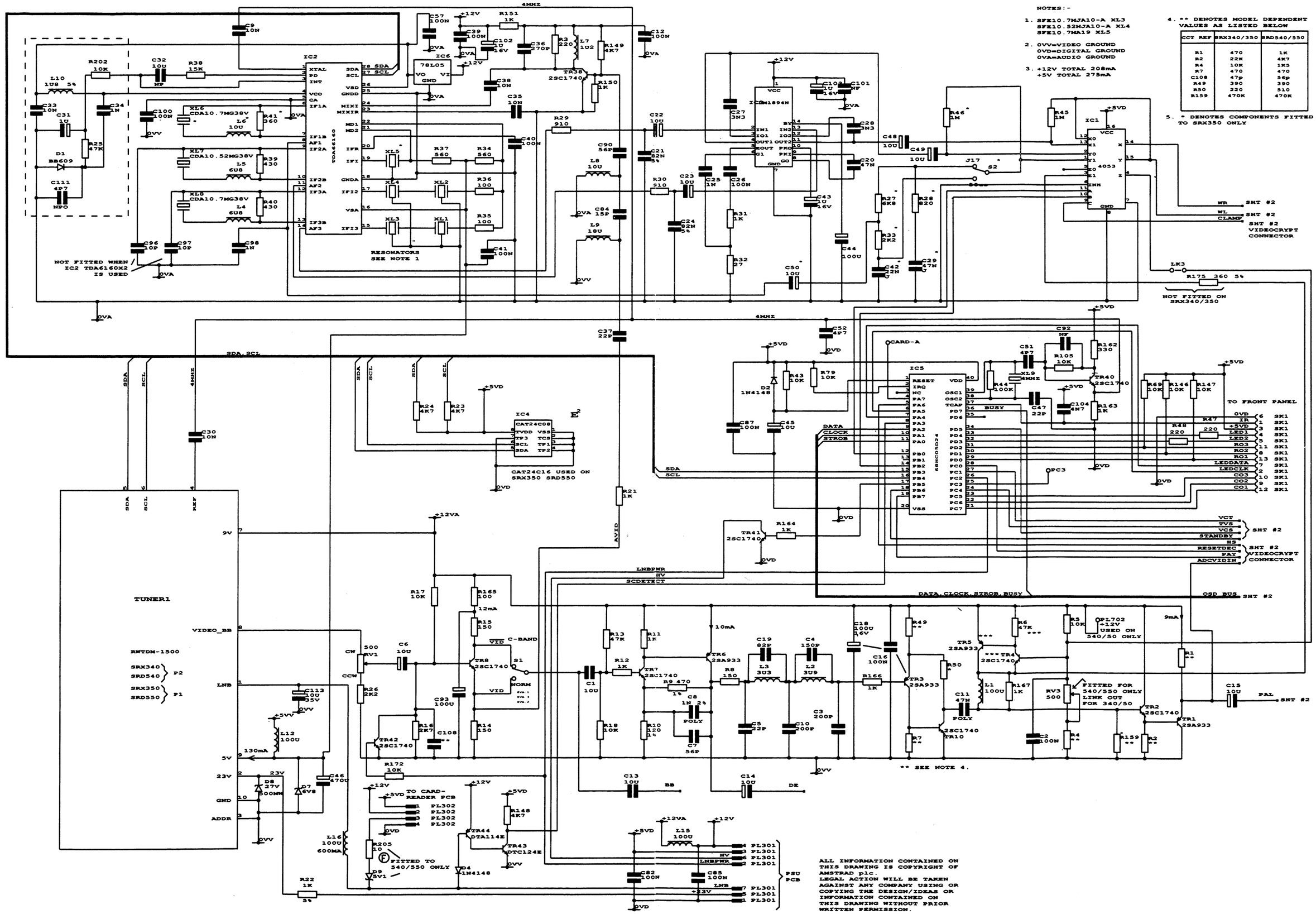
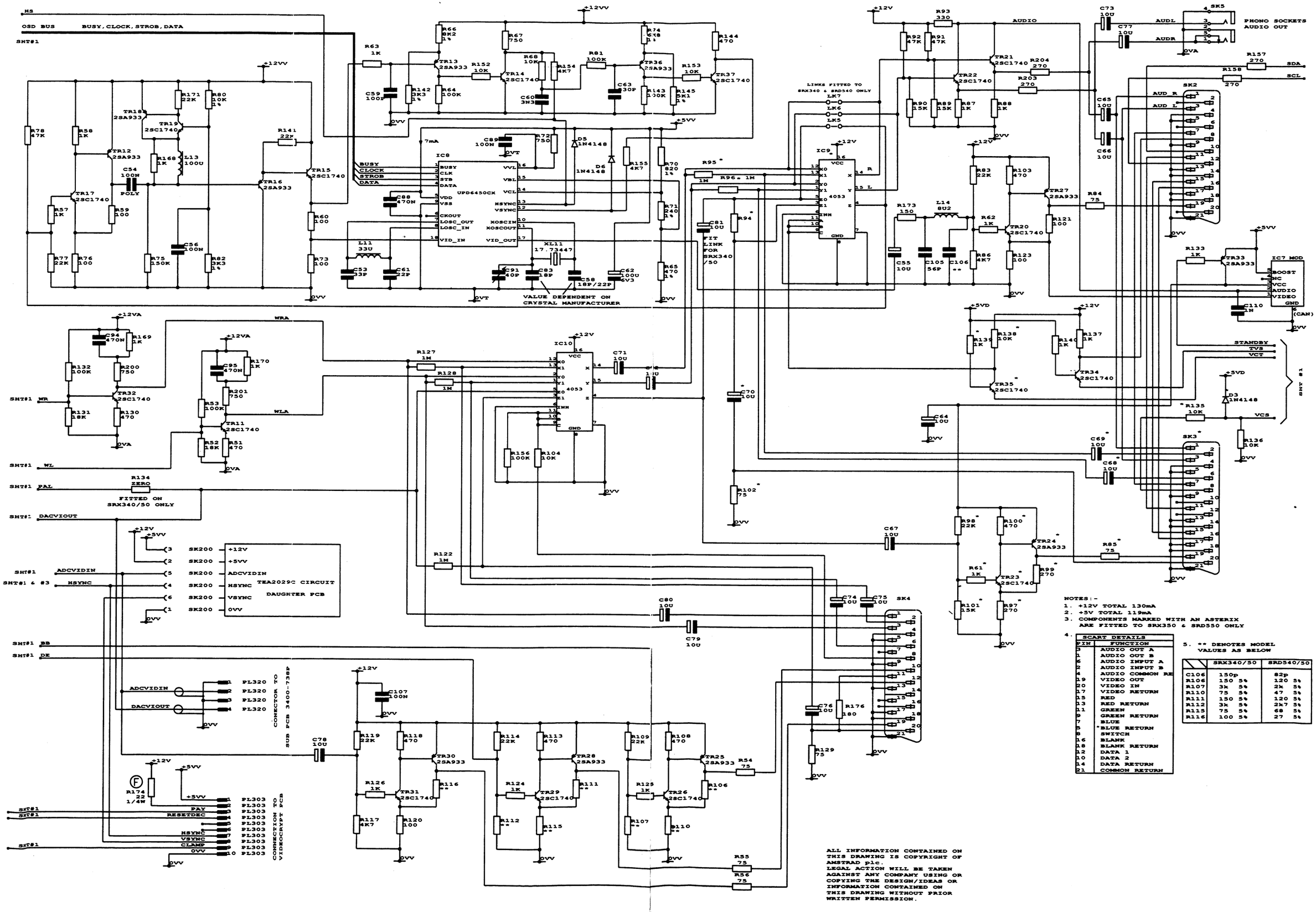
Schematic Diagram Main, Video, Audio & Microprocessor



Schematic Diagram Main Output Switching



NOTES:-

1. +12V TOTAL 130mA
2. +5V TOTAL 119mA
3. COMPONENTS MARKED WITH AN ASTERIX ARE FITTED TO SRX350 & SRD550 ONLY
4. SCART DETAILS

PIN	FUNCTION
3	AUDIO OUT A
1	AUDIO OUT B
6	AUDIO INPUT A
2	AUDIO INPUT B
4	AUDIO COMMON RE
19	VIDEO OUT
20	VIDEO IN
17	VIDEO RETURN
15	RED
13	RED RETURN
11	GREEN
9	GREEN RETURN
7	BLUE
5	*BLUE RETURN
8	SWITCH
16	BLANK
18	BLANK RETURN
12	DATA 1
10	DATA 2
14	DATA RETURN
21	COMMON RETURN

5. ** DENOTES MODEL VALUES AS BELOW

	SRX340/50	SRD540/50
C106	150p	82p
R106	150 5%	120 5%
R107	3k 5%	2k 5%
R110	75 5%	47 5%
R111	150 5%	120 5%
R112	3k 5%	2k7 5%
R115	75 5%	68 5%
R116	100 5%	27 5%

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Deutsch

TECHNISCHE DATEN

EMPFÄNGER

Abmessungen, Gewicht:	335 x 62 x 250mm (B x H x T), 1,9kg
Stromversorgung:	220-230V/50Hz Wechselstrom
Empfangsfrequenzbereich:	700-2050MHz
Kanalbandbreite:	27MHz
Oszillatorfrequenzbereich:	0 und 9,3-12GHz
Feinabstimmungsbereich:	±10MHz
Dynamikbereich:	-20 bis -60dBm
Schwellenwert:	8dB Störspannungsabstand (mit Schwellenwerterweiterung)
AM-Kanalinterferenzschwelle:	-15dBc (typisch)
RF-Ausgangssignal:	Kanal 38 (einstellbar von Kanal 30-40)
Signal-Rauschabstand S/N: (bezogen auf Basisbandbreite 5MHz für PAL bei C/N=14dB und nominellen Hub s-s des Nutzsignals)	43,5dB
Audio-Zwischenträger:	5,5-8,5MHz
Audio-Ausgangspegel:	2Vs-s bei 50kHz Hub
Frequenzgang:	40Hz-15kHz
Eingangs-/Ausgangsanschlüsse:	LNB 75 Ohm Typ F RF 75 Ohm koaxial (2x) AUDIO OUT RCA-Phonostecker (2x) SCART/PERITEL 21-polig DECODER 21-polig

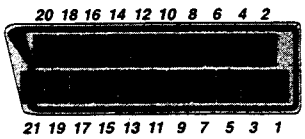
SLB3 LNB

Eingangsfrequenzbereich:	10,70-11,80GHz
Ausgangsfrequenzbereich:	950-2050MHz
Oszillatorfrequenz:	9,75 GHz
Verstärkung:	55dB
Rauschmaß:	1dB typisch
Träger-Rauschabstand C/N:	15 dB
Polarisationsumschaltung:	elektrisch (13/17V)
Ausgangsbuchse:	75 Ohm Typ F

ANTENNE

	SDM60	SDM80
Öffnungswinkel:	3,0	2,4
Gewinn G: bei 11,5GHz	36dB	38dB
Rauschtemperatur Ta: 'Clear Sky' beim 30° Elevationswinkel	75K	65K
G/T-Wert (dB/K): (mit o.g.LNB)	14	16.5

BUCHSEN AN DER GERÄTERÜCKSEITE



TV SCART/PERITEL

1	Audio-Ausgang rechts	11	Grün*
2	Audio-Eingang rechts	12	Serielle Schnittstelle (Uhr) †
3	Audio-Ausgang links	13	Rot/Erde
4	Audio/Erde	14	Serielle Schnittstelle (Erde) †
5	Blau/Erde	15	Rot*
6	Audio-Eingang links	16	Austastsignal*
7	Blau*	17	Video/Erde
8	Externe Schaltspannung	18	Austastsignal/Erde
9	Grün/Erde	19	Video-Ausgang
10	Serielle Schnittstelle (Daten) †	20	Video-Eingang
		21	Abschirmung/Erde

DECODER

1	Audio-Ausgang rechts	12	MAC-Grundband-Ausgang
2	Audio-Eingang rechts	13	Erde
3	Audio-Ausgang links	14	(nicht belegt)
4	Audio/Erde	15	(nicht belegt)
5	Erde	16	(nicht belegt)
6	Audio-Eingang links	17	Video/Erde
7	(nicht belegt)	18	(nicht belegt)
8	Audio/Video INT/EXT	19	PAL-Grundband-Ausgang (gefiltert/geklemmt)
9	Erde	20	Video-Eingang
10	PAL-Grundband-Ausgang (ungefiltert/ungeklemmt)	21	Abschirmung/Erde
11	Grün		

* (nicht belegt)
† (Verwendung nur durch Fachhändler)

Español

ESPECIFICACIONES

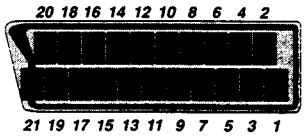
RECEPTOR

Medidas, peso:	335 x 250 x 62 mm, 1,9 kg
Alimentación de la red:	220-230V CA 50 Hz
Gama de frecuencias de sintonización:	de 700 a 2050 MHz
Ancho de banda del canal:	27 MHz
Gama del oscilador local:	0 y de 9.3 a 12 GHz
Gama de sintonización fina:	±10 MHz
Gama dinámica:	de -20 a -60 dBm
Umbral:	8dB C/N (con extensión del umbral)
Umbral de interferencia entre canales comunes de AM:	-15dBc típico
Salida de RF:	Canal 38 (ajustable 30-40)
Subportadora de audio:	de 5.5 a 8.5 MHz
Nivel de salida de audio:	2V pk-pk a 50 kHz de desviación entrada
Respuesta de audio:	de 40 Hz a 15 kHz
Conectores de entrada/salida:	LNB 75 ohmios de tipo F RF 75 ohmios coaxial (x2) AUDIO OUT RCA fono (x2) SCART/PERITEL de 21 vías DECODER de 21 vías

SLB3 LNB

Gama de frecuencia de entrada:	de 10.70 a 11.80 GHz
Gama de frecuencia de salida:	de 950 a 2050 MHz
Oscilador local:	9.75 GHz
Amplificación:	55 dB
Ruido:	1 dB típico
Conmutación de polarización:	Eléctrica (13/17V)
Conector de salida:	75 ohmios de tipo F

ENCHUFES DEL PANEL TRASERO



TV SCART/PERITEL

1	Salida de audio R	12	Interfaz serie (reloj) †
2	Entrada de audio R	13	Derivación a tierra roja
3	Salida de audio L	14	Derivación a tierra de interfaz serie †
4	Derivación a tierra de audio	15	Rojo*
5	Derivación a tierra azul	16	Señal de supresión del haz*
6	Entrada de audio L	17	Derivación a tierra de vídeo
7	Azul*	18	Derivación a tierra de la señal de supresión del haz
8	Conmutación externa	19	Salida de vídeo
9	Derivación a tierra verde	20	Entrada de vídeo
10	Interfaz serie (datos) †	21	Pantalla/derivación a tierra
11	Verde*		

DECODER

1	Salida de audio R	11	Verde
2	Entrada de audio R	12	Salida de banda base MAC
3	Salida de audio L	13	Derivación a tierra
4	Derivación a tierra de audio	14	(no se utiliza)
5	Derivación a tierra	15	(no se utiliza)
6	Entrada de audio L	16	(no se utiliza)
7	(no se utiliza)	17	Derivación a tierra de vídeo
8	Audio/vídeo INT/EXT	18	(no se utiliza)
9	Derivación a tierra	19	Salida de banda base PAL (filtrada/bloqueada)
10	Salida de banda base PAL (sin filtrar/sin bloquear)	20	Entrada de vídeo
		21	Pantalla/derivación a tierra

* (no instalado)
† (para uso exclusivo del distribuidor)

Français

SPECIFICATIONS

RECEPTEUR

Dimensions, poids:	335 x 250 x 62 mm, 1,9 Kg
Alimentation:	220-230 V AC 50 Hz
Bande passante d'accord:	700 à 2050 MHz
Largeur de canal:	27 MHz
Bade de l'oscillateur local:	0 et 9.3 - 12 GHz
Réglage fin:	±10 MHz
Dynamique:	-20 à -60 dB
Sensibilité:	8 dB de porteuse au bruit (avec extension de seuil)
Seuil d'interférence AM:	-15 dBc typique
Sortie antenne:	Canal 38 (réglable entre 30 et 40)
Sous-porteuse Audio:	5.5 à 8.5 MHz
Niveau de sortie:	2 V c-c avec 50 kHz de déviation
Bande passante:	40 Hz à 15 kHz
Prises d'entrées/sorties:	LNB 75 ohms Type-F RF 75 ohms coaxial (x2) AUDIO OUT RCA phono (x2) SCART/PERITEL 21 broches DECODER 21 broches

LNB SLB3

Bande passante entrée:	10.70 à 11.80 GHz
Bande passante sortie:	950 à 2050 MHz
Oscillateur local:	9,75 GHz
Gain:	55 dB
Bruit:	1 dB typique
Commutation de polarisation:	Electrique (13/17 V)
Prise de sortie:	Type F 75 ohms

PRISES ARRIERES

TV SCART/PERITEL

1	Sortie Audio (droit)	12	Interface série (horloge) †
2	Entrée Audio (droit)	13	Masse rouge
3	Sortie Audio (gauche)	14	Masse interface série †
4	Masse Audio	15	Rouge*
5	Masse bleue	16	Commutation rapide*
6	Entrée Audio (gauche)	17	Masse vidéo
7	Bleu*	18	Masse commutation rapide
8	Tension de commutation	19	Sortie vidéo
9	Masse verte	20	Entrée vidéo
10	Interface série (données) †	21	Masse/Blindage
11	Vert*		

DECODER

1	Sortie Audio (droit)	11	Vert
2	Entrée Audio (droit)	12	Sortie Bande de Base MAC
3	Sortie Audio (gauche)	13	Masse
4	Masse Audio	14	(non utilisée)
5	Masse	15	(non utilisée)
6	Entrée Audio (gauche)	16	(non utilisée)
7	(non utilisée)	17	Masse vidéo
8	Contrôle INT/EXT Audio/Vidéo	18	(non utilisée)
9	Masse	19	Sortie Bande de Base PAL (filtrée/clampée)
10	Sortie Bande de Base PAL (non filtrée/non clampée)	20	Entrée Vidéo
		21	Masse (blindage)

* (non connectée)
† (pour revendeurs seulement)

Nederlands

TECHNISCHE GEGEVENS

ONTVANGER

Afmetingen, gewicht:	335 x 250 x 62 mm, 1,9 kg
Netvoeding:	220-230 v wisselspanning 50 Hz
Afstembereik:	700-2050 MHz
Kanaal bandbreedte:	27 MHz
Interne oscillator:	0 en 9,3-12 GHz
Fijnafstemming:	±10 MHz
Dynamiek:	-20 tot -60 dBm
AM co-intereferentie threshold:	-15dBc typical
Drempel:	8 dB signaal/ruis (met drempeluitbreiding)
RF uit:	Kanaal 38 (instelbaar van 30 tot 40)
Audio hulpdraaggolf:	5,5-8,5 MHz
Audio uitgangsniveau:	2 v piek-piek bij 50 kHz ingangszwaai
Audio frequentiebereik:	40 Hz-15 kHz
Connectors in/uitgang:	LNB type F, 75 Ω RF coax 75 Ω (2x) AUDIO OUT cinch (2x) SCART 21-polig DECODER 21-polig

SLB3 LNB

Frequentiebereik ingang:	10,70-11,80 GHz
Frequentiebereik uitgang:	950-2050 MHz
Interne oscillator:	9,75 GHz
Versterking:	55 dB
Ruisgetal:	1 dB
Polarisatieschakeling:	elektrisch (13/17 v)
Uitgangsconnector:	type F, 75 Ω

AANSLUITINGEN OP ACHTERZIJDE

TV SCART/PERITEL

1	Audio uit R	12	Seriële interface (klok) †
2	Audio in R	13	Rood massa
3	Audio uit L	14	Seriële interface (massa) †
4	Audio massa	15	Rood*
5	Blauw massa	16	Blanking*
6	Audio in L	17	Video massa
7	Blauw*	18	Blanking massa
8	Extern schakelen	19	Video uit
9	Groen massa	20	Video in
10	Seriële interface (data) †	21	Afscherming/massa
11	Groen*		

* (niet voorzien)
† (alleen voor dealergebruik)

DECODER

1	Audio uit R	11	Groen
2	Audio in R	12	MAC baseband uit
3	Audio uit L	13	Massa
4	Audio massa	14	(niet gebruikt)
5	Massa	15	(niet gebruikt)
6	Audio in L	16	(niet gebruikt)
7	(niet gebruikt)	17	Video massa
8	Audio/video INT/EXT	18	(niet gebruikt)
9	Massa	19	PAL baseband uit (filtered/clamped)
10	PAL baseband uit (unfiltered/unclamped)	20	Video in
		21	Afscherming/massa

Polski

DANE TECHNICZNE

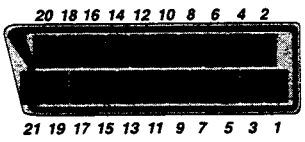
ODBIORNIK

Wymiary, ciężar	335 x 250 x 62 mm, 1,9 kg
Zasilanie	220-230V ac 50Hz
Zakres częstotliwości strojenia	700-2050MHz
Szerokość pasma kanału	27MHz
Zakres miejscowego oscylatora	0 i 9.3-12GHz
Zakres precyzyjnego dostrajania	±10MHz
Dynamika zakresu	-20 do -60 dBm
Próg słyszalności	8dB C/N (z rozszerzeniem progu)
AM próg słyszalności interferencji międzykanałowej	-15dBc typowy
Wyjście RF	Kanał 38 (regulacja 30-40)
Częstotliwość infranośna audio	5.5-8.5MHz
Poziom wyjściowy audio	2V pk-pk z odchyleniem wejściowym 50kHz
Odpowiedź audio	40Hz-15kHz
Wtyczki wejściowe i wyjściowe	LNB 75 omów typu F RF 75 omów współosiowa (x2) AUDIO RCA fon (x2) SCART/PERITEL o 21 wtykach DECODER o 21 wtykach

SLB3 LNB

Zakres częstotliwości wejściowej	10.70-11.80GHz
Zakres częstotliwości wyjściowej	950-2050MHz
Miejscowy oscylator	9.75GHz
Zysk	55dB
Rejestrator hałasu	1dB typowy
Przełącznik polaryzacji	Elektryczny (13/17V)
Wtyczki wyjściowe	75 omów typu F

GNIAZDKA TYLNEJ TABLICY KONTROLNEJ



TV SCART/PERITEL

1	Wyjście audio P(Prawe)	12	Seryjne połączenie komunikacyjne (zegar)†
2	Wejście audio P	13	Uziemienie czerwonego
3	Wyjście audio L(Lewe)	14	Uziemienie seryjnego połączenia komunikacyjnego†
4	Uziemienie audio	15	Czerwone*
5	Uziemienie niebieskiego	16	Sygnał kasowania wiązki*
6	Wejście audio L	17	Uziemienie video L
7	Niebieski*	18	Uziemienie sygnału kasowania wiązki
8	Przełącznik zewnętrzny	19	wyjście video
9	Uziemienie zielonego	20	Wejście video
10	Seryjne połączenie komunikacyjne (data)†	21	Ekran/uziemienie
11	Zielony*		

DECODER

1	Wyjście audio P	12	Wyjście pasma bazy MAC
2	Wejście audio P	13	Uziemienie
3	Wyjście audio L	14	(nieużywany)
4	Uziemienie audio	15	(nieużywany)
5	Uziemienie	16	(nieużywany)
6	Wejście audio	17	Uziemienie video
7	(nieużywany)	18	(nieużywany)
8	Audio/video INT/EXT	19	Wyjście pasma bazy PAL (z filtrem i blokadą)
9	Uziemienie	20	Wejście video
10	Wyjście pasma bazy PAL (bez filtra i blokady)	21	Ekran/uziemienie
11	Zielony		

* (nie zostały załączone)
† (wyłącznie do użytku dystrybutora)

Voltage charts

Voltage measurements under no signal condition.
Set in standby mode.

IC600 CS3842

PIN	
1	2.14V
2	2.54V
3	0.05V
4	1.90V
5	0.0V
6	1.10V
7	11.47V
8	5.02V

IC601 CNY17E-3X
Use **Correct** Earth

1	4.85V
2	0.50V
3	NC
4	2.97V
5	5.05V

IC300 LM392

1	30.5V
2	12.0V
3	29.5V
4	0.0V
5	0.0V
6	5.10V
7	14.4V
8	25.5V

TR1 2SA933

C	11.95V
E	11.90V
B	11.4V

TR301 2SA933

C	30.6V
E	30.6V
B	29.6V

TR302 2SC945

C	29.6
E	1.9V
B	1.9V

TR304 2SD313D

C	13.3V
E	13.0V
B	0.0V

PL301 V. Output Connector

1	0
2	4.9V
3	5.1V
4	12.4V
5	30.5V
6	11.3V
7	1.9V

NOTE FOR THE ENGINEERS

Please note which type of satellite dish and type of LNB is installed when installing this equipment.

This receiver is factory set for SLB3 or TLB3. To use older type of Amstrad LNB, change receivers local oscillator setting to 10GHz. To do this press set-up repeatedly so installation menu is displayed on the screen. Press select + to change LNB setting to 10.000GHz and then exit.